THE CAMEL SITE. ROCK RELIEFS OF LIFE-SIZED CAMELS AND EQUIDS IN THE ARABIAN DESERT

Guillaume Charloix*, Maria Guagnin**, Abdullah M. Alsharekh***, Ahmed Al-Qaed****

Introduction
The life-sized and extremely detailed reliefs of the Camel Site near Sakaka (Jawf Province) are unique in the ancient Near East (fig. 1). To date, 12 reliefs are known, which depict at least 10 camels (Camelus dromedarius), three equids (likely Equus africanus, Equus africanus asinus or Equus hemionus) and four unidentifiable animals1. Despite an advanced state of erosion on all panels, surviving details such as the depiction of nostrils, lips or the muscles of the legs attest to a great attention to detail. The time and effort that the engravers invested into the creation of these monumental reliefs are indicative of the importance camels and equids once had for the prehistoric populations of Arabia. Domesticated camels and donkeys were essential for survival in hostile and barren regions, where they were used to carry loads across great distances, and as a source of milk and meat2. We also know from rock art scenes that their wild ancestors were frequently hunted3. The reliefs at the Camel Site appear to show camels and equids in their natural state. To date no evidence for domestication or human control of the animals has been identified, and human figures appear to be absent.

The exceptionally skilled use of high and bas relief, and the depiction of life-sized, naturalistic camels and equids, are unparalleled on the Arabian Peninsula. Moreover, the complete absence of contemporaneous inscriptions and the scarcity of other types of petroglyphs is surprising, given the location of the Camel Site in a region that is culturally rich throughout prehistory4. The location and character of the site thus raise a number of questions:

What was the function or possible symbolic significance of the site?
Who carved these reliefs and why do they not occur anywhere else in Arabia?
What techniques and tools were used to carve these majestic animals?
How old are the reliefs and how long was the site in use?

Of particular concern is the current condition of the site, which is threatened by an extremely rapid natural erosion of the underlying sandstone. How can we mitigate an erosion process that is causing fragments to become detached and can potentially cause the loss of entire reliefs every year? The reliefs are visibly in a very poor state of conservation and the risk of destruction of this major rock art site in the short-term is serious.

Discovery and Main Characteristics
The Camel Site was recorded in 2016 as part of the archaeological mission of Dumat al-Jandal5 after it was reported to the co-director of the mission by Mr. Hussain Al-Khalifah, the former local representative of the SCTH. Three short visits in March 2016 and 2017 provided a first inventory of this monumental rock art site.

By 2017, 16 'Panels' (a mixture of rock art panels and reliefs) had been recorded, mostly around three
1. Unidentified juvenile (left) and adult (right) animal on Panel 12 at night. (© Camel Site Archaeological Project, P. Mora)

2. Photo showing the legs of two camels on Panel 10 (foreground) and the original position of the block on the upper right. (© Camel Site Archaeological Project, M. Guagnin)
Map of the Camel Site, showing the location of features, and areas of modern human disturbance. (© Camel Site Archaeological Project, G. Charloux, P. Flohr).
rocky promontories (fig. 3). These outcrops are formed by a beige-orange sandstone that is strongly exfoliated and deeply eroded across much of the surface. In addition, numerous blocks along the foot of the outcrop have fallen from higher up on the cliffs. Many have subsequently been moved by bulldozers to develop the land for agriculture. A total of 12 panels are carved in a mixture of bas- and high relief, showing life-sized and occasionally even larger animals. In addition, two lithic scatters were recorded at the base of the outcrops, and two simple engravings were recorded on smaller outcrops that surround the site (fig. 3: 15).

Among the most striking Panels are numbers 2, 8, 10, 11 and 12. Panel 2, in bas-relief, shows a dromedary and a juvenile equid. The two animals are facing each other, and their heads almost touch. Only the central part of the relief remains, which includes the head and neck of the camel and the head and upper body of the equid. The remainder of the relief has been either fallen or weathered away.

Panel 8 shows the head and backline of a finely carved camel in bas-relief.

Panel 10 was found on a fallen block and shows two sets of camel legs at different elevations (fig. 2). Panel 11 is heavily exfoliated across the surface, but the body and legs of a camel are relatively well-preserved and give a good impression of the original condition of the site (fig. 4). Panel 12 shows a relief of two over-sized animals, one adult and one juvenile. It is unclear if the depiction shows equids or camels, but the thickness of the legs makes the representation larger than life-sized.

The monumental panels appear to have been carved by different individuals, and, possibly, over a long period, leading to a collection of different techniques, craftsmanship and styles. Although the art of high relief was widespread in the Middle East, there is only one comparable site that also shows camels in a combination of bas-relief and high relief: the two camel parades in the Siq in Petra, which date to the Nabataean period. This similarity formed the basis of a preliminary chronological assessment of the site.

The Camel Site Archaeological Project and First Results of a Pilot Season in 2018

In October 2018, a multidisciplinary research project with researchers from the French CNRS, the Max Planck Institute, the Saudi Commission for Tourism and National Heritage and King Saud University began to carry out a systematic study of the site. The aim of the project is to improve our understanding of the archaeological context, age and the overall significance of the Camel Site. During a pilot fieldwork mission in 2018, 15 new panels were recorded at the site. In addition, the site was assessed by a team of specialists, which included a conservator, a stone mason, and a site management specialist. Initial results show that the site has been damaged by different types of natural effects, including sunlight, wind, water (irrigation and rainfall) and salt (fig. 5). This is compounded by agricultural activities at the site such as landscaping and bulldozing, which have caused substantial additional damage (fig. 3). High-resolution 3D modelling of the panels was carried out by a 3D engineer to create a digital record of the current state of preservation, and in anticipation of further erosion and damage in the near future.

Among the main discoveries of 2018, was the identification of an additional life-sized camel relief (Panel 31) close to Panel 11. This new panel is in extremely poor condition and only visible in optimal light conditions. In addition, several new fragments of camel reliefs (numbers 18-19) were identified on stones that have been moved from their original location by landscaping associated with agricultural activities at the site. A row of small equids carved in bas-relief and a small camel engraving (Panel 20) were also identified opposite Panel 11 on spur B (fig. 6). Further petroglyphs on outcrops located outside the core area were recorded (Panels 25-29, fig. 2).

The distribution of petroglyphs at the Camel Site shows a very dense concentration of reliefs on the three main spurs (the core area), while simpler rock engravings are predominantly found on adjacent outcrops. This pattern is mirrored in the distribution of lithics, where concentrations drop off sharply with increasing distance to the site. However, it is not yet clear whether this apparent distribution of lithics is a result of prehistoric or farming activities in the surrounding landscape. Nevertheless, the high density of reliefs and lithics in the core area of the Camel Site suggest that it was an important location.

Detailed analysis of the reliefs also allowed the following interesting observations:

The miniature figures (Panels 20 and 10) appear to belong to a later tradition: on Panel 10 two small camel engravings were placed over the top of the life-sized Camel relief, some time before the block detached from the cliff and came to rest upside down.

Macroscopic analysis of tool marks suggests that all rock reliefs were made using lithics (fig. 7).
5. A conservator showing the location of a fallen fragment from the body of a camel on Panel 1. (© Camel Site Archaeological Project, G. Charloux)

6. Row of small equids carved in bas-relief on Panel 20. (© Camel Site Archaeological Project, G. Charloux)

7. A stone mason studying tool marks on the heads of a camel and an equid, Panel 2. (© Camel Site Archaeological Project, G. Charloux)
The southern façade of Spur A, which contains reliefs 2 and 3 appears to have been made up of at least two tiers of animal reliefs. The foot of an equid from the upper tier is still visible above the head of a juvenile equid on Panel 2. Panel 3, though not in its original position, is still located on the upper tier. Moreover, Panel 1 appears to have fallen from this façade, and was likely originally placed above Panel 2.

Where the neck of the camel is preserved, all camel representations show a bulging neckline that is typical of a male camel in rut. This feature appears to symbolise a particular time of year, as the rut takes place at the end of the wet season. This is consistent with the location of the site near a natural depression that fills up with rain water in winter. The seasonal availability of water may have facilitated occupation of the site, which must have been long enough for the engravers to create the reliefs (around 2 weeks per panel)11.

The Camel Site seems to belong to a wider regional cultural context. Engravings of live-sized naturalistic camels were recorded by the French component of the archaeological project at Dumat al-Jandal. Successive activities of engraving, polishing and reworking of the rock art panels suggest a long-lived tradition or renewed interaction with these monumental representations12.

A possible symbolic function of the Camel Site is now supported by a range of complementary information: the unique character of the site, the size and quality of the reliefs, the concentration of reliefs in the core area, the almost complete absence of later engravings, the presence of grooves on the bodies of the carved animals (broadly contemporary with the original use of the site), and the existence of a tradition of life-sized camels engravings in the wider region. However, the overall regional archaeological context of the site is still little understood and many questions remain. Was the Camel Site an open-air sanctuary devoted to wild camels and equids? And/or was it a symbolic meeting place for local prehistoric populations?

Although a Nabataean date had originally been suggested for the site13, a prehistoric age is now seriously being considered, based on the rock varnish, the state of erosion, the tool marks, the lack of evidence for domestication, and the lithic industry at the Camel Site. In addition, the site appears to show successive activities of engraving, polishing and reworking of the rock art panels suggest a long-lived tradition or renewed interaction with these monumental representations14.

Notes

1 CNRS, UMR 8167 Orient et Méditerranée, guillaume.charloux@crms.fr.
3 ** Max Planck Institute for the Science of Human History.
4 *** Institute for the Science of Human History.
5 Fulbert Dubois, freelance.
6 Bellwald, Ruben 2003.
7 Charlois, Ruben 2003.
8 Franck Burgos, CNRS/UMR 8167.
9 Pascal Flohr, EAMENA, University of Oxford.
10 Pascal Flohr, CNRS/Archéovision.
11 Charlois e Guagnin in corso di stampa.
12 Ibidem.
15 Harrigan 2012.

References

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